

## **A Study of Exercise and Sports with the Relation of Level of Adjustment and Self-Concept among Players**

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### **Abstract**

The aim of the present study to investigate the relationship between exercise and sports with level of adjustment and self-concept among various outdoor game players, by employing a sample of 200 subjects in which 100 subjects were sportsman playing at list dist. Level or more. (50 Male and 50 female) and 100 were non-sportsman (05 Male and 50 female) with age ranging from 18 to 22. Self-concept rating scale by Dr. R.K. Saraswat. NCERT New Delhi, in this research second tools, Bells adjustment inventory by Dr. R.K. Ojha was used. Adjustment is the main component part of human life. A factorial design was used; since there were two independent variables i.e. types of students and Gender. A 2X2 factorial design was used to analyzing the data. It was found that the students from playing any games at list dist. Level or more have better self-concept than the non-sportsman students. And adjustment level fond more from students playing games regularly than the non-sportsman.

### **Introduction:**

The physical benefits of exercise are obvious. Exercise in fact is all about the physical benefits – increased strength, fitness, speed and power as well as aesthetic appeal. However, what is also greatly affected by exercise is the mind, and there are just as many psychological benefits of exercise to consider. Exercise is good for both the body and the mind.

The psychological benefits of exercise work in many ways, but the first and most obvious is the way in which exercise causes the immediate release of hormones. Specifically training causes the release of endorphins which are feel good hormones that leave you feeling calm, energised and optimistic. It is endorphins that are responsible for the so called ‘runners high’ and also one of the reasons that exercise can be addictive as you try and recreate this high. Endorphins block the feelings of pain and create feelings of euphoria by attaching to receptors on the outer surfaces of brain cells. The receptors that are responsive to endorphins are actually the same as those for many recreational drugs making endorphins the brain’s very own marijuana meaning the psychological benefits of exercise are the same but without the negative side effects such as marijuana and brain damage.

Part of the reason for this bodily response is that endorphins are designed to be produced during times to stress – to help us run and fight through pain and injury (like adrenaline). This means that when we exercise today our brain interprets it as the body being under stress and needing you to remain calm, happy and pain free to perform. This makes exercise a great way to deal with daily troubles and while addiction is possible... what are the downsides to being addicted to staying healthy?? If you are feeling low, lethargic

or unmotivated, then a quick workout can help get you back on form. Furthermore, regular exercise might help your ‘base level’ of hormones to be more positive and euphoric making it a great natural antidepressant.

Other psychological benefits of exercise revolve around the way in which it improves IQ and overall cognitive function. It has been shown that regular cardiovascular activity can help improve our short term memory which in turn helps us with non verbal reasoning and maths tasks – improving our ‘fluid intelligence’ (intelligence which doesn’t require previous knowledge). One study of mice showed that regular treadmill exercise prevented ‘ischemia-induced apoptotic neuronal cell death’ in the dentate gyrus – basically meaning it prevented the deterioration of brain cells in a critical part of the brain.

**Objective of the study:-**

1. To investigate the status of self-concept among sports man and non-sportsman.
2. To compare the level of adjustment among sportsman and non-sportsman.
3. To find out the gender wise difference of adjustment among sportsman and non-sportsman.
4. To find out the gender wise difference of self-concept of sportsman and non-sportsman.
5. To find out the relation ship between adjustment and self-concept.

**Hypothesis:-**

1. The sportsman will have more adjusted than non-sportsman.
2. There sportsman will have better self-concept than the non-sportsman.
3. Female sportswomen will have better adjusted than male sportsman
4. There will be no gender difference of self-concept.
5. There will be positive effect of adjustment and self-concept.

**Sample:-** The sample consists of 200 subject 100 from playing in any national or dist. level games and 50 male and 50 female. 100 subjects selected those who are no play or exercise in any games. 50 male and 50 female. The sample of the present study is shown as below. All subjects included in the study from urban area. The subjects selected in the sample from various games like cricket, Hockey, Kho-Kho, etc. the age range between 20 to 25, of both male and female.

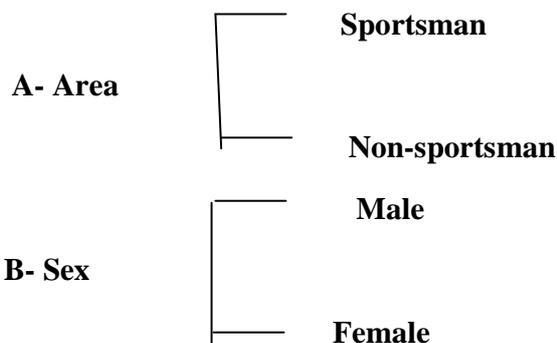
**Distribution of Participants.**

		Type of Participates		Grand Total
		(a1) Sportsman	(a2) Non-sportsman	
Sex (B)	(b1)Male	50	50	
	(b2) Female	50	50	

The subject selected in the sample in the age group of 20 to 25 who are living in urban and rural areas.

● **Design:-**

2×2 factorial design was used for research.



**Tools:**

**A. Self-concept Rating scale**

The present investigations second tools used a self-concept rating scale by Dr. R.K. Saraswat. NCERT New Delhi. Self-concept is a dominant element in personality development. Self-concept has been referred by Lowe as “Ones attitude towards self and Pederson as organized configuration of perceptions of self.

**B. Bells Adjustment Inventory.**

In this research used third tools, Bells adjustment inventory by Dr. R.K. Ojha. Adjustment is the main component part of human life. Livening is processes of adjustment and it is a process of unique importance in human life. It is a satisfactory and harmonious relationship of an organism to its environment. Thus the term adjustment may be defined as “the process of finding and adopting modes of behaviors suitable to the environment or to the changes in the environment.

**Result:**

**Table No. 4.1**

**Analysis of variance dependant variable and Adjustment.**

**(Sportsman and non-sportsman and gender wise.)**

Source	Type III Sum of Squares	do	Mean Square	F
Type of students	192.080	1	192.080	6.10*
Gender	124.820	1	124.820	3.90(NS)

<b>Type of students X Gender</b>	<b>54.080</b>	<b>1</b>	<b>54.080</b>	<b>1.692</b>
<b>Total</b>	<b>147616.000</b>	<b>200</b>		

(\*Significant at 0.05 level)

The first factor was related to the Type of students i.e. sportsman and non-sportsman. It is represented by main effect 'A'. Main effect 'A' was highly significant. The table 4.1 shows that subjects of sportsman and non-sportsman differ significantly among themselves on the level of adjustment. A summary of two way ANOVA shows that main effect type of students is significant (F=6.10, df 1 and 196, p< .05). Hence the sportsman play in any games doing exercise directly or in-directly as compare to non-sportsman, exercise positive impact on human body as well as psychological, it cause to level of difference of level of adjustment among sportsman and non-sportsman differ significantly them self. and the summary of ANONA shoes there is significant difference level of adjustment of sportsman and non-sportsman.

**Table no. 4.2**  
**Compare the level of adjustment among sportsman and non-sportsman.**

Type of students	Mean	N	Std. Deviation
Sportsman	27.53	100	5.47
Non-sportsman	25.57	100	5.93

**Figure No. 4.1**  
**Mean difference of sportsman and non-sportsman on their adjustment level.**

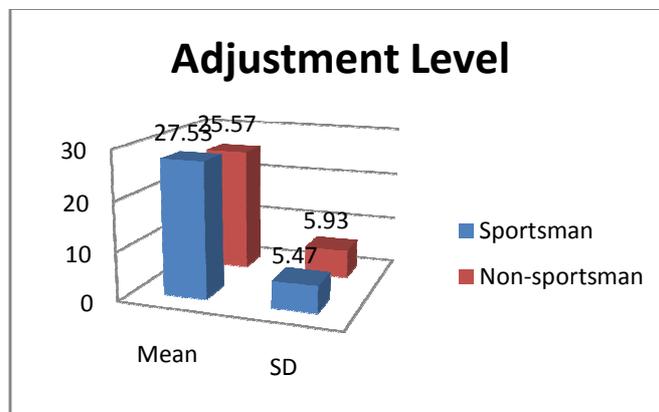


Figure no.4.1 showing mean and SD values of adjustment form sportsman and non-sportsman College students. Its indicating that mean value of sportsman 27.53 and SD 5.47 is comparatively larger than mean value of students those who are not play a game of exercise 25.57 and SD 5.93 on adjustment level. According to mean value college students those who are from sports has better adjustment level than the students those who are not play a games or exercise. This result favors to sportsman sides and it can say to exercise and playing a games positive impact on level of than non-sportsman.

The second factor was related to the gender. It is represented by main effect 'B'. Main effect 'B' is not significant. (F= 3.90, df=1 and 196, not significant at any level). According to this 'F' ratio there is no gender difference of adjustment of both group of sportsman and non-sportsman.

**Table no. 4.3**

**Compare the level of adjustment among male and female sportsman.**

Gender	Mean	N	Std. Deviation
Male	27.3400	100	5.87620
Female	25.7600	100	5.58881
Total	26.5500	200	5.77445

**Figure No. 4.2**

**Mean difference of male and female sportsman on their adjustment level.**

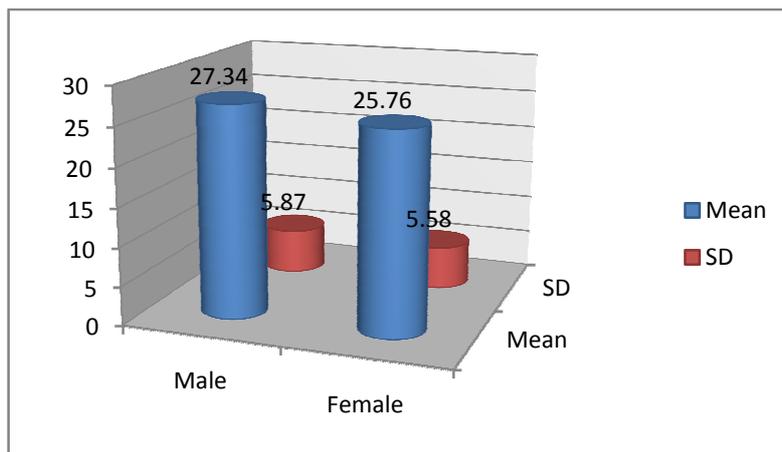


Figure no.4.2 showing mean and SD values of adjustment form male and female sportsman. Its indicating that mean value of male sportsman mean score was 27.34. and SD 5.87 is comparatively larger than mean value of students from female sportsman 25.76 and SD 5.58 on level of adjustment but it is not significant. According to mean

value male sportsman has better adjusted than the female sportsman according to mean comparison hypothesis “**Female sportswomen will have better adjusted than male sportsman**” is now rejected.

In addition in main effects of the factors, there are possibilities of two way interaction effects. In the summary of ANOVA table no. 4.1 shows that the interaction effect  $A \times B$  ( $F= 1.692$ ,  $df 1, 196$  NS) not significant. Adjustment level by sportsman not influence by the joint effect of type of students and gender represent by ‘A’ and Gender represent by ‘B’.

The second dependant variable in this study was self-concept. These variable investigate into independent variable i.e. area of residence and gender. The following table shows that significant difference of area of residence and gender, dependant variable self-concept.

**Table No. 4.4**  
**Analysis of variance dependant variable self-concept.**  
**(Sportsman and non-sportsman and gender wise.)**

Source	Type III Sum of Squares	df	Mean Square	F
Type of students	49675.52	1	49675.52	116.549* *
Gender	17186.58	1	17186.58	40.323**
Type of students * Gender	1884.98	1	1884.98	4.423*
Error	83539.24	196	426.22	
Total	4609190.0	200		

Type of students i.e. sportsman and no- sportsman. It is represented by main effect ‘A’. Main effect ‘A’ was highly significant. The table 4.2 shows that subjects of sportsman and non-sportsman differ significantly among themselves on the there self-concept. A summary of two way ANOVA shows that main effect type of students is significant ( $F=116.54$ ,  $df 1$  and  $196$ ,  $p < .01$ ). According to this result hypothesis “**there will be positive impact of exercise and sports activity on Self-concept,**” is accepted.

. Hence the sportsman play in any games doing exercise directly or in-directly as compare to non-sportsman, exercise positive impact on human body as well as psychological, it cause to level of difference of their self-concept among sportsman and non-sportsman differ significantly them self. and the summary of ANONA shoes there is significant difference self-concept of sportsman and non-sportsman.

**Table no. 4.5**

**Compare the status of self-concept among sportsman and non-sportsman.**

Type of students	Mean	N	Std. Deviation
Sportsman	165.04	100	21.61
Non-sportsman	133.52	100	23.85
Total	149.2800	200	27.66329

**Figure No. 4.3**

**Mean difference of sportsman and non-sportsman on their self-concept.**

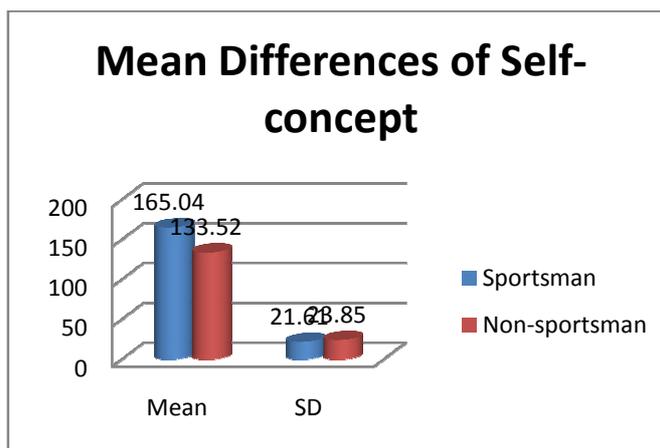


Figure no.4.3 showing means and SD values of self-concept form sportsman and non-sportsman. Its indicating that mean value of sportsman 165.4 and SD 21.61 is comparatively larger than mean value of non-sportsman 133.52 and SD 23.85 on Self-concept. According to mean value sportsman has better Self-concept than the non-sportsman. This result to favors of hypothesis **“that is There sportsman will have better self-concept than the non-sportsman”** This hypothesis is accepted.

The table no 4.2 shows that male and female subjects **also highly** significant among themselves on the dependant variable self-concept. A summary of two way ANOVA shows that the main effect of gender significant (F= **40.32**, df 1 and 196 **P<0.01**) these ‘F’ ratio indicate that there is noticeable difference in **0.01** level of self-concept among male and female. According to this result hypothesis **“There will be no gender difference of self-concept, has rejected.”**

**Table no. 4.6**  
**Compare the status of self-concept among male and female sportsman.**

Gender	Mean	N	Std. Deviation
Male	158.55	100	23.18
Female	140.01	100	28.76
Total	149.28	200	27.66

**Figure No. 4.4**  
**Mean difference of male and female on their self-concept.**

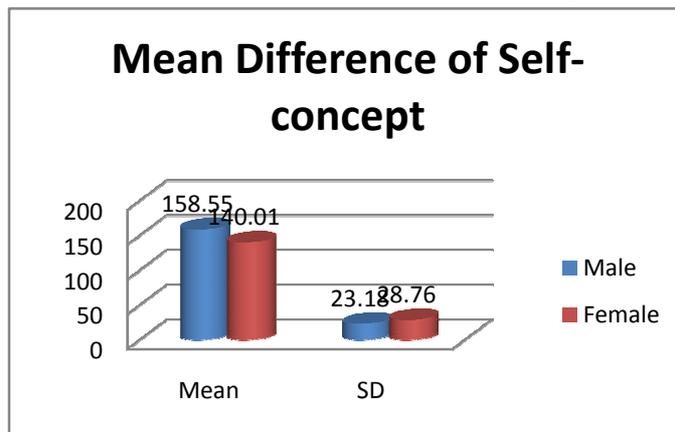


Figure no.4.4 showing mean and SD values of self-concept form male and female Sportsman. Its indicating that mean value of male sportsman 158.55 and SD 23.18 is comparatively larger than mean value of female sportsman mean score was 140.01 and SD 28.76 on Self-concept. The graph indicates male students high score of mean and female sportsman low score than male sportsman. These results indicate that male sportsman better self-concept than the female sportsman.

## Relationship

**Table no 4.7 correlation between Adjustment and self-concept**

Variables	Method of correlation	Adjustment	Self-concept
Adjustment	Pearson Correlation	1	.154(**)
	Sig. (2-tailed)	.	.029
	N	200	200
Self-concept	Pearson Correlation	.154(**)	1
	Sig. (2-tailed)	.029	.
	N	200	200

\* Correlation is significant at the 0.05 level (2-tailed).

The obtained coefficients of correlation among various measures for the subjects of sportsman and non-sportsman groups and males and females are presented in tables no 4.7. In the present study aims to investigate the relationship between adjustment and self-concept, and the result calculated by person correlation method. The results are as follows.

The table no.4.7 shows that significant correlation dependant variable home environment and self-concept. The correlation value 'r' is .154 is positively significant at .01 level. These results indicate that the students who have more scored on adjustment them also obtain high score on self-concept. According to hypothesis **there will be positive effect of adjustment and self-concept, is accepted.**

In the present investigation the whole score consider for analysis relationship between adjustment and self-concept, including area and Gender wise score concenter together

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